

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Currently Amended) A connector pin assembly comprising:
a body having a passage longitudinally extending through an outer surface thereof and having a polygonally shaped side surface section extending completely around a longitudinal portion of the interior of said passage;

a lock member received in said passage and circumscribed by said side surface section, said lock member being rotatable relative to said body between locking and unlocking positions; and

a resilient detent structure carried by said lock member for rotation therewith relative to said body and being circumscribed by said side surface section, said resilient detent structure being operative to releasably retain said lock member in either of said locking and unlocking positions and being slidably engageable with and deformable by said side surface section, during rotation of said lock member relative to said body, in a manner yieldingly resisting rotation of said lock member relative to said body from said locking to said unlocking position.

2. (Original) The connector pin assembly of Claim 1 wherein:
said resilient detent structure circumscribes said lock member.

3. (Original) The connector pin assembly of Claim 2 wherein:
said resilient detent structure, when said lock member is in either of said locking and unlocking positions, is complementarily received in said polygonally shaped side surface section.

4. (Original) The connector pin assembly of Claim 3 wherein:
said resilient detent structure has a square configuration.

5. (Original) The connector pin assembly of Claim 1 wherein:
said polygonally shaped side surface section has a square shape.

6. (Original) The connector pin assembly of Claim 1 wherein:
said lock member has a retaining member thereon which engages said body in a manner captively retaining said lock member in said passage.

7. (Original) The connector pin assembly of Claim 6 wherein:
said retaining member is a snap ring received in an interior side surface groove of said passage.

8. (Original) The connector pin assembly of Claim 1 wherein:
said body has an elongated shape with an exterior side surface that extends between opposite end portions of said body, outwardly circumscribes said passage, and is substantially parallel to the length of said body.

9. (Original) The connector pin assembly of Claim 1 wherein:
said lock member has a generally cylindrical portion with an outer end from which a locking lobe transversely projects.

10. (Original) The connector pin assembly of Claim 9 wherein:
said outer end has a noncircularly cross-sectioned rotational driving portion thereon.

11. (Original) The connector pin assembly of Claim 10 wherein:
said rotational driving portion projects longitudinally outwardly from said locking lobe.

12. (Original) The connector pin assembly of Claim 1 wherein:
said lock member has a slot extending therethrough and opening outwardly through opposite outer side portions thereof, and
said resilient detent structure includes a resilient detent member extending through said slot and having opposite end portions projecting outwardly beyond said opposite outer side portions of said lock member and engaging circumferentially spaced apart portions of said polygonally shaped side surface section.

13. (Original) The connector pin assembly of Claim 12 further comprising:

an annular bushing circumscribing a portion of said lock member and being press-fitted into said passage, said bushing captively retaining said resilient detent structure within said polygonally shaped side surface section.

14. (Original) The connector pin assembly of Claim 13 further comprising:

an O-ring seal member carried by said lock member and sealingly engaging a circular interior side surface portion of said bushing.

15. (Original) The connector pin assembly of Claim 1 wherein:
said connector pin assembly is configured to be operatively inserted into aligned openings in telescoped excavating wear and support members to captively retain them in a telescoped relationship.

16. (Original) A connector pin assembly comprising:
a body having a passage longitudinally extending inwardly through an outer surface thereof, said passage having a noncircularly shaped side surface section;

a lock member received in said passage and circumscribed by said side surface section, said lock member being rotatable relative to said body; and

a resilient detent member carried by said lock member for rotation therewith and having a periphery circumscribing said lock member, said periphery complementarily and slidably engaging said noncircularly shaped side surface section.

17. (Original) The connector pin assembly of Claim 16 wherein:
said side surface section has a polygonal shape.

18. (Original) The connector pin assembly of Claim 17 wherein:
said polygonal shape is a square shape.

19. (Original) The connector pin assembly of Claim 16 wherein:

said body has an elongated shape with an exterior side surface that extends between opposite end portions of said body, outwardly circumscribes said passage, and is substantially parallel to the length of said body.

20. (Original) The connector pin assembly of Claim 16 wherein:

said connector pin assembly is configured to be operatively inserted into aligned openings in telescoped excavating wear and support members to captively retain them in a telescoped relationship.

21. (Original) A connector pin assembly comprising:

a body having a passage longitudinally extending inwardly through an outer surface thereof, said passage having a noncircularly shaped side surface section;

a lock member received in said passage and circumscribed by said side surface section, said lock member being rotatable relative to said body and having a slot extending therethrough and opening outwardly through opposite outer side surface portions of said lock member; and

a resilient detent member extending through said slot and having opposite end portions projecting outwardly beyond said outer side surface portions and slidably engaging said noncircularly shaped side surface section of said passage.

22. (Original) The connector pin assembly of Claim 21 wherein:

said side surface section has a polygonal shape.

23. (Original) The connector pin assembly of Claim 22 wherein:
said polygonal shape is a square shape.

24. (Original) The connector pin assembly of Claim 21 wherein:
said body has an elongated shape with an exterior side surface that extends between opposite end portions of said body, outwardly circumscribes said passage, and is substantially parallel to the length of said body.

25. (Original) The connector pin assembly of Claim 21 wherein:
said connector pin assembly is configured to be operatively inserted into aligned openings in telescoped excavating wear and support members to captively retain them in a telescoped relationship.

26. (Original) A connector pin assembly and associated apparatus comprising:

first and second telescoped members having aligned connector openings therein; and

a connector pin assembly captively retaining said first and second members in a telescoped relationship, said connector pin assembly including:

a body removably received in said aligned connector openings and blocking separation of said first and second members from one another, said body having a passage extending inwardly through an outer surface thereof, said passage having a noncircularly shaped side surface section,

a lock member received in said passage and circumscribed by said side surface section, said lock member being rotatable relative to said

body between a locking position in which said lock member blocks removal of said body from said connector openings, and an unlocking position in which said lock member permits removal of said body from said connector openings, and

a resilient detent member carried by said lock member for rotation therewith and being operative to releasably retain said lock member in said locking position, said detent member having a periphery circumscribing said lock member, said periphery complementarily and slidably engaging said noncircularly shaped side surface section.

27. (Original) The connector pin assembly and associated apparatus of Claim 26 wherein:

said first member is an excavating support member, and
said second member is an excavating wear member.

28. (Original) The connector pin assembly and associated apparatus of Claim 27 wherein:

said excavating support member is an adapter, and
said excavating wear member is a tooth point.

29. (Original) The connector pin assembly and associated apparatus of Claim 26 wherein:

said side surface section has a polygonal shape.

30. (Original) The connector pin assembly and associated apparatus of Claim 29 wherein:

said polygonal shape is a square shape.

31. (Original) The connector pin assembly and associated apparatus of Claim 26 wherein:

said body has an elongated shape with an exterior said surface that extends between opposite end portions of said body, outwardly circumscribes said passage, and is substantially parallel to the length of said body.

32. (Original) A connector pin assembly and associated apparatus comprising:

first and second telescoped members having aligned connector openings therein; and

a connector pin assembly captively retaining said first and second members in a telescoped relationship, said connector pin assembly including:

a body removably received in said aligned connector openings and blocking separation of said first and second members from one another, said body having a passage extending inwardly through an outer surface thereof, said passage having a noncircularly shaped side surface section,

a lock member received in said passage and circumscribed by said side surface section, said lock member having a slot extending therethrough and opening outwardly through opposite outer side surface portions of said lock member, said lock member being rotatable relative to said body between a locking position in which said lock member blocks removal of said body from said connector openings, and an unlocking position in which said lock member permits removal of said body from said connector openings, and

a resilient detent member carried by said lock member for rotation therewith and being operative to releasably retain said lock member in said locking position, said detent member extending through said slot and having opposite end portions projecting outwardly beyond said outer side surface portions and slidably engaging said noncircularly shaped side surface section of said passage.

33. (Original) The connector pin assembly and associated apparatus of Claim 32 wherein:

said first member is an excavating support member, and
said second member is an excavating wear member.

34. (Original) The connector pin assembly and associated apparatus of Claim 33 wherein:

said excavating support member is an adapter, and
said excavating wear member is a tooth point.

35. (Original) The connector pin assembly and associated apparatus of Claim 32 wherein:

said side surface section has a polygonal shape.

36. (Original) The connector pin assembly and associated apparatus of Claim 35 wherein:

said polygonal shape is a square shape.

37. (Original) The connector pin assembly and associated apparatus of Claim 36 wherein:

said body has an elongated shape with an exterior said surface that extends between opposite end portions of said body, outwardly circumscribes said passage, and is substantially parallel to the length of said body.